## PIFSC Report on the Logbook Program for the American Samoa Longline Fishery April-June 2007<sup>1</sup>

Fisheries Monitoring and Socioeconomics Division Pacific Islands Fisheries Science Center

Summary statistics of American Samoa longline catch and effort for the second quarter of 2007, based on date of haul, are shown in Table 1. The table is derived from all logbook data submitted as of July 30, 2007. As of this date, the documented delinquency rate according to the Department of Marine and Wildlife Resources (DMWR) Daily Effort Census and Delinquency Reporting System for the second quarter of 2007 was about 10%. Some of the data not submitted may be for vessels that began fishing trips in the second quarter but have still not returned to port to turn in their logbooks. Accordingly, the summary data in this report are considered preliminary and subject to change as additional data are received and processed.

According to the Daily Effort Census, 27 vessels were engaged in longline fishing during the second quarter of 2007 (Fig. 1) and so far 25 of these vessels turned in some or all of their longline logs for sets made during the quarter. These 25 vessels made 1,322 sets (Fig. 2) and deployed 3,854,013 hooks (Fig. 3). This quarter showed a slight increase in both effort and catch over the second quarter of last year. The number of vessels turning in logs this quarter was the same as a year ago during the same quarter. The number of sets increased by 4% and the number of hooks increased by 10%, establishing a new second quarter record for the number of hooks deployed. The average number of hooks per set also increased by about 6%, from 2,752 to 2,915, reflecting the continuing trend toward a fishing fleet consisting mostly of large vessels.

The total catch for all species was 93,640 fish (Fig. 4), an increase of only 3% compared to the second quarter of last year. Albacore continued to dominate the catch with 66,096 fish caught in the second quarter of 2007 (Fig. 5), a 0.4% increase over the 65,810 albacore caught in the second quarter of last year. Yellowfin tuna (Fig. 8) was the second largest component of the catch with 11,202 fish. The yellowfin tuna catch had the largest increase of 139% over the second quarter of 2006. Bigeye tuna (Fig. 6) showed a 29% increase in catch over the second quarter of last year. The catch of all other species was down dramatically from the same quarter a year ago with skipjack tuna (Fig. 7) down by 30%, mahimahi (Fig. 9) down by 62%, wahoo (Fig. 10) down by 23%, billfish (Fig. 11) down by about 34% and the catch of sharks (Fig. 12) down by 41%.

The albacore catch/1000 hooks (Fig. 13) was down by 9% from the second quarter of 2006, reflecting the 0.4% increase in albacore catch and a 10% increase in the number of hooks used. Because the 10% larger effort in the second quarter of 2007 resulted in only a 3% increase in catch, the percent increase or decrease in catch/1000 hooks was smaller than the percent increase or decrease in the catch for each species mentioned above. Only bigeye tuna (Fig. 14) and yellowfin tuna (Fig. 16) showed an increase in catch/1000 hooks with bigeye tuna increasing by 17% and yellowfin tuna increasing by 117%. All other species had declines in catch/1000 hooks compared to the second quarter of last year with skipjack tuna (Fig. 15) decreasing by 36%, mahimahi (Fig. 17) decreasing by 65%, wahoo (Fig. 18) decreasing by 30%, billfish (Fig. 19) decreasing by 40% and sharks (Fig. 20) decreasing by 52%.

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PIFSC Data Report DR-07-007 Issued 31 August 2007

Table 1. Summary of fish catch and nominal fishing effort by American Samoa Longline vessels during 2<sup>nd</sup> Quarter 2007 based on longline logbooks submitted through July 30, 2007

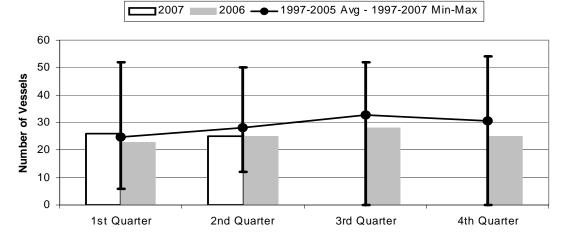
## TRIP INFORMATION

Number of Vessels:25Number of Trips:106Number of Sets:13221000's of Hooks Set:3854Number of Lightsticks Used:0

## **CATCH INFORMATION**

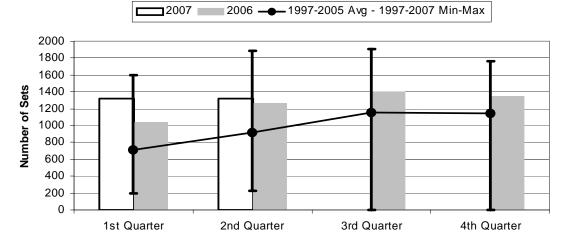
Species	# Caught	# Kept	# Finned	# Caught/ 1000 Hooks
BILLFISH				
Blue marlin	629	89		0.16
Striped marlin	82	7		0.02
Sailfish	60	3		0.02
Spearfish	98	6		0.03
Swordfish	40	29		0.01
TOTALS	909	134		0.24
SHARKS				
Blue shark	771	2		0.20
Shortfin mako shark	15	2		0.00
Thresher shark	13	0		0.00
White tip oceanic	153	0		0.04
shark				
Sharks (misc)	155	0		0.04
TOTALS	1107	4		0.29
TUNA				
Albacore	66096	65998		17.15
Bigeye tuna	3418	3180		0.89
Skipjack tuna	5480	4232		1.42
Yellowfin tuna	11202	10903		2.91
TOTALS	86196	84313		22.37
OTHER PELAGICS				
Mahimahi	531	329		0.14
Moonfish	87	21		0.02
Oilfish	1395	6		0.36
Pomfret	131	16		0.03
Wahoo	3149	2576		0.82
TOTALS	5293	2948		1.37
NON-PMUS				
Pelagic fish (misc)	133	7		0.03
TOTALS	133	7		0.03

Figure 1. American Samoa Longline Vessels Submitting Logs by Quarter for



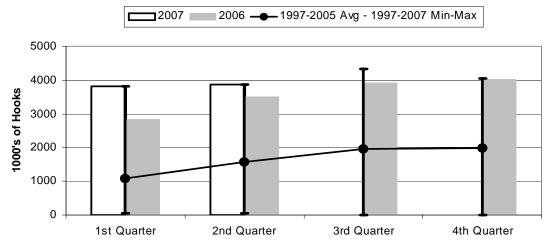
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	26	25	0	0
2006	23	25	28	25
1997-2007 Max	52	50	52	54
1997-2005 Avg	24.9	28.0	32.9	30.6
1997-2007 Min	6	12	0	0

Figure 2. Number of Sets by American Samoa Longline Vessels by Quarter for



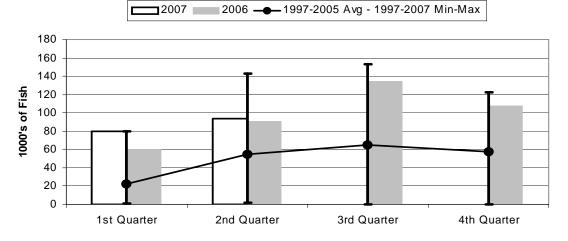
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1316	1322	0	0
2006	1041	1273	1402	1354
1997-2007 Max	1602	1886	1903	1758
1997-2005 Avg	708	918	1158	1141
1997-2007 Min	192	223	0	0

Figure 3. Number of Hooks Set by the American Samoa Longline Fleet by Quarter for



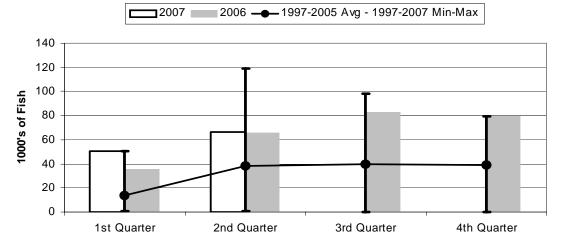
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	3805	3854	0	0
2006	2840	3503	3910	4013
1997-2007 Max	3805	3854	4338	4044
1997-2005 Avg	1087	1566	1957	1986
1997-2007 Min	41	51	0	0

Figure 4. American Samoa Longline Total Catch (All Species) by Quarter for



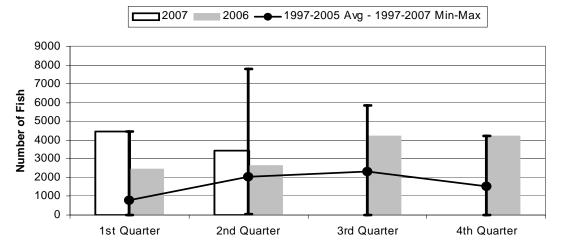
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	79.57	93.64	0.00	0.00
2006	60.74	90.82	134.74	107.66
1997-2007 Max	79.57	142.60	153.30	122.34
1997-2005 Avg	22.28	54.88	65.03	57.22
1997-2007 Min	1.32	1.42	0.00	0.00

Figure 5. American Samoa Longline Albacore Catch by Quarter for



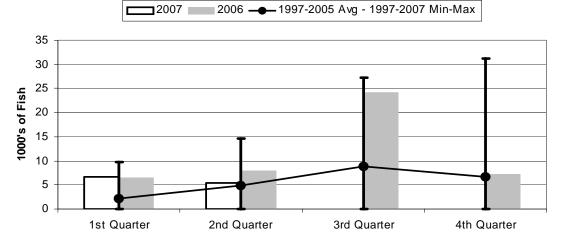
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	50.38	66.10	0.00	0.00
2006	35.21	65.81	82.72	79.36
1997-2007 Max	50.38	118.99	98.09	79.36
1997-2005 Avg	13.85	38.04	39.76	39.20
1997-2007 Min	0.94	0.85	0.00	0.00

Figure 6. American Samoa Longline Bigeye Tuna Catch by Quarter for



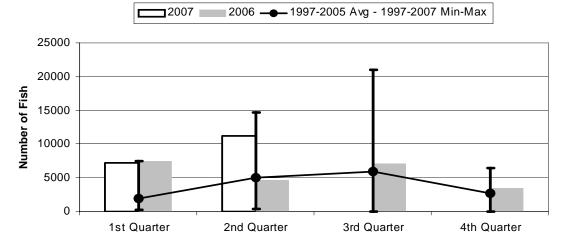
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	4466	3418	0	0
2006	2448	2647	4211	4217
1997-2007 Max	4466	7785	5824	4217
1997-2005 Avg	781	2019	2314	1521
1997-2007 Min	6	26	0	0

Figure 7. American Samoa Longline Skipjack Tuna Catch by Quarter for



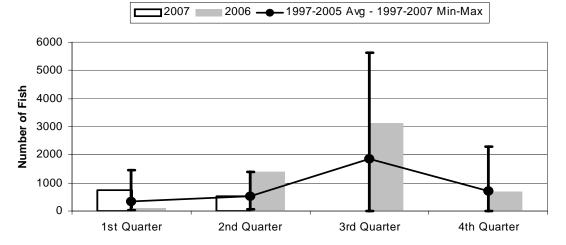
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	6.74	5.48	0.00	0.00
2006	6.58	7.85	24.20	7.23
1997-2007 Max	9.81	14.61	27.23	31.19
1997-2005 Avg	2.20	4.92	8.91	6.67
1997-2007 Min	0.00	0.01	0.00	0.00

Figure 8. American Samoa Longline Yellowfin Tuna Catch by Quarter for



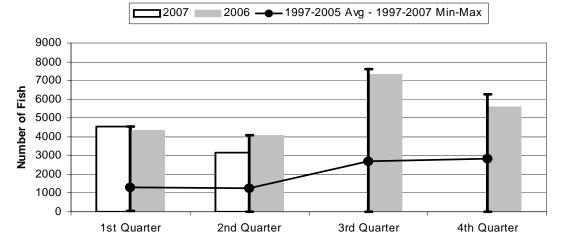
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	7174	11202	0	0
2006	7428	4678	7066	3459
1997-2007 Max	7428	14681	20993	6503
1997-2005 Avg	1961	5063	5896	2665
1997-2007 Min	213	356	0	0

Figure 9. American Samoa Mahimahi Catch by Quarter for



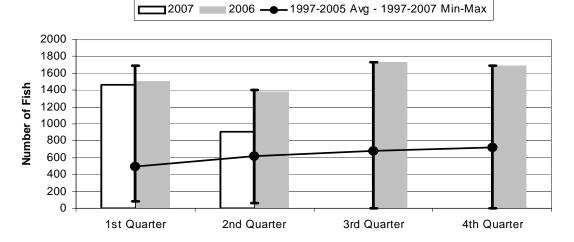
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	729	531	0	0
2006	101	1391	3126	691
1997-2007 Max	1455	1391	5642	2297
1997-2005 Avg	338	517	1857	711
1997-2007 Min	30	59	0	0

Figure 10. American Samoa Wahoo Catch by Quarter for



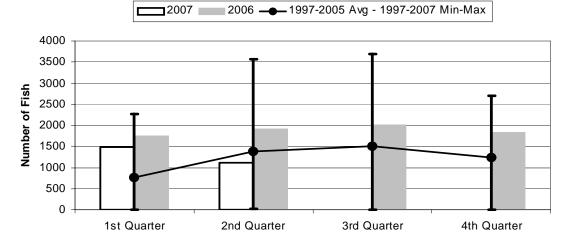
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	4524	3149	0	0
2006	4376	4076	7342	5634
1997-2007 Max	4524	4076	7629	6281
1997-2005 Avg	1308	1275	2683	2835
1997-2007 Min	27	20	0	0

Figure 11. American Samoa Billfish Catch by Quarter for



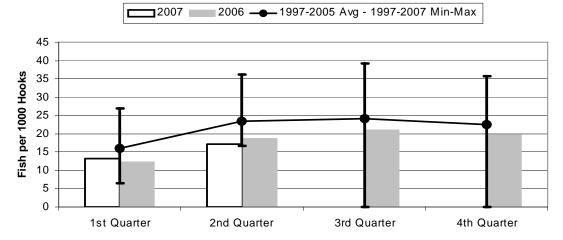
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1468	909	0	0
2006	1509	1386	1729	1690
1997-2007 Max	1692	1404	1729	1690
1997-2005 Avg	492	621	680	725
1997-2007 Min	83	58	0	0

Figure 12. American Samoa Shark Catch by Quarter for



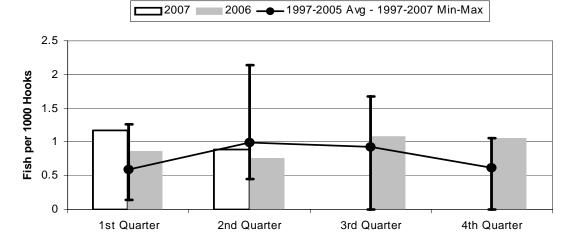
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1480	1107	0	0
2006	1757	1909	2012	1845
1997-2007 Max	2262	3562	3686	2695
1997-2005 Avg	764	1379	1502	1243
1997-2007 Min	5	16	0	0

Figure 13. American Samoa Longline Albacore Catch/1000 Hooks by Quarter for



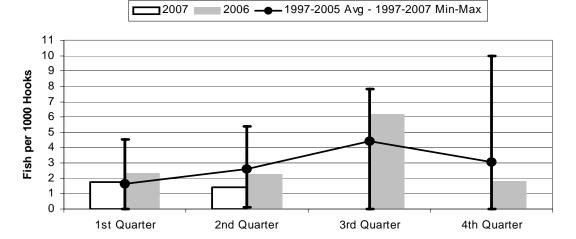
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	13.24	17.15	0.00	0.00
2006	12.40	18.79	21.16	19.77
1997-2007 Max	27.01	36.18	39.13	35.75
1997-2005 Avg	16.00	23.54	24.22	22.39
1997-2007 Min	6.58	16.77	0.00	0.00

Figure 14. American Samoa Longline Bigeye Tuna Catch/1000 Hooks by Quarter for



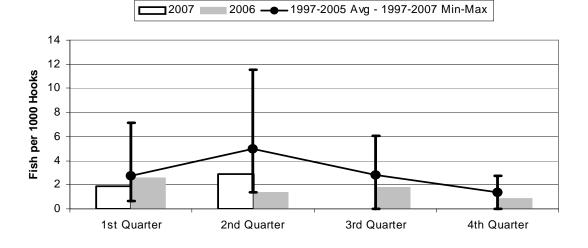
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1.174	0.887	0.000	0.000
2006	0.862	0.756	1.077	1.051
1997-2007 Max	1.267	2.145	1.676	1.051
1997-2005 Avg	0.586	0.988	0.928	0.622
1997-2007 Min	0.146	0.452	0.000	0.000

Figure 15. American Samoa Longline Skipjack Tuna Catch/1000 Hooks by Quarter for



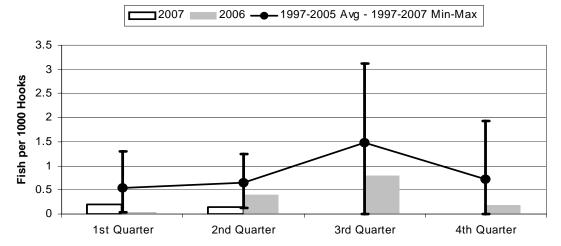
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1.770	1.422	0.000	0.000
2006	2.317	2.241	6.190	1.801
1997-2007 Max	4.556	5.388	7.837	9.975
1997-2005 Avg	1.642	2.596	4.430	3.059
1997-2007 Min	0.000	0.118	0.000	0.000

Figure 16. American Samoa Yellowfin Tuna Catch/1000 Hooks by Quarter for



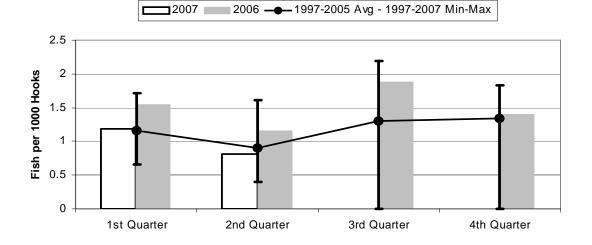
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1.886	2.907	0.000	0.000
2006	2.616	1.336	1.807	0.862
1997-2007 Max	7.120	11.51	6.041	2.757
1997-2005 Avg	2.717	5.015	2.807	1.398
1997-2007 Min	0.663	1.336	0.000	0.000

Figure 17. American Samoa Longline Mahimahi Catch/1000 Hooks by Quarter for



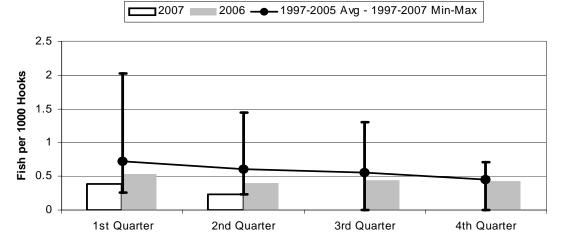
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	0.192	0.138	0.000	0.000
2006	0.036	0.397	0.800	0.172
1997-2007 Max	1.304	1.248	3.125	1.932
1997-2005 Avg	0.549	0.649	1.488	0.723
1997-2007 Min	0.036	0.123	0.000	0.000

Figure 18. American Samoa Wahoo Catch/1000 Hooks by Quarter for



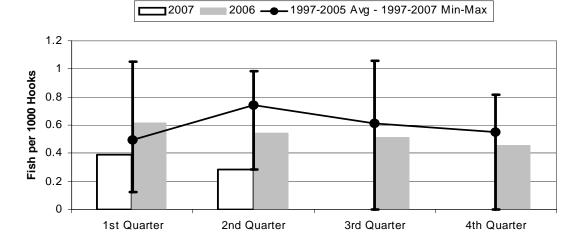
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1.189	0.817	0.000	0.000
2006	1.541	1.164	1.878	1.404
1997-2007 Max	1.710	1.617	2.195	1.832
1997-2005 Avg	1.161	0.896	1.303	1.340
1997-2007 Min	0.657	0.394	0.000	0.000

Figure 19. American Samoa Billfish Catch/1000 Hooks by Quarter for



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	0.386	0.236	0.000	0.000
2006	0.532	0.396	0.442	0.421
1997-2007 Max	2.019	1.439	1.306	0.712
1997-2005 Avg	0.724	0.608	0.549	0.451
1997-2007 Min	0.252	0.236	0.000	0.000

Figure 20. American Samoa Shark Catch/1000 Hooks by Quarter for



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	0.389	0.287	0.000	0.000
2006	0.619	0.545	0.515	0.460
1997-2007 Max	1.051	0.986	1.061	0.819
1997-2005 Avg	0.494	0.741	0.615	0.553
1997-2007 Min	0.122	0.287	0.000	0.000